## LEWIS FARM

IN THE MERRIMACK VALLEY ANDOVER • MASSACHUSETTS

## 1960 CATALOGUE

SPRING and FALL

28 Years a Grower of
Quality
Strawberry Plants
and Asparagus Roots

\*

VARIETY DESCRIPTION

W. S. Department of Agriculture

LIBR

PRICE LIST
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#### ROGER H. LEWIS

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## Greetings from the Lewis Farm Strawberry and Asparagus Nursery

To Our Friends and Customers:

We wish to extend greetings to old customers and new. We thank you for your past patronage and look forward to serving you again. Visitors to our farm are always welcome. Inquiries for additional information will be answered to the best of our ability. We endeavor to make this catalog an aid to growers of strawberries and asparagus.

This year we offer plants of twenty-one varieties of strawberries originating from virus-free stock, field grown on fumigated soil, field dusted, sprayed, irrigated, then winter mulched for a wonderful crop of clean, strong-rooted plants. We also have listed some fine asparagus

roots from best strains available.

We are continuing to operate a screenhouse for maintaining a nucleus of screen-protected virus-free stock of the various varieties.

Rotation of our nursery land, organic build-up of soil, soil fumigation before setting strawberries, mechanical digging of plants to preserve the root systems, and promptness in shipping will continue to be our practice in order to give you the best plants possible.

## Strawberry Varieties

Our selection of varieties includes those varieties that have proved adaptable to the Northeast and are desirable in quality; also the newer varieties worthy of trial for their desirability and adaptability. Varieties follow in order of volume of sales in 1959.

We use all precautions to have all of our stock true to name. If any do prove otherwise, we will replace this stock, if available, but

in no case will we be responsible for any sum greater than that origin-

ally paid for the plants.

### Standard June Varieties

\*Indicates Varieties Originating from Virus-Free Stock

#### \*CATSKILL

Catskill has been and still is a leader in the Northeast. It grows a vigorous plant, is a prolific bearer of large midseason to late berries of excellent flavor with a very attractive red color and bright green cap. The Catskill berry tops the market, which along with its great yielding ability makes it a most desirable strawberry. The berries hold their size through the season better than any other variety we have ever had. It is considered a good freezing berry.

#### \*SPARKLE

Sparkle is an attractive bright dark red, fine flavored, high quality berry. Its productivity along with its other good qualities have made it one of the top four. It fruits over a longer period and lasts longer than any other variety if given good fertility and moisture. Sparkle, like Catskill, does best on a medium to heavy soil. Under poor conditions Sparkle has a tendency to lose size after the first few pickings. It is rated a good freezer, an excellent market berry, and certainly is one of the leading all-around strawberries today and is more adaptable to a wide range of soil and climate than many other varieties.

#### \*ROBINSON (Scarlet Beauty)—Origin, Michigan Station

The Robinson produces a large to very large bright glossy light red berry of very attractive appearance. Under good conditions berries hold their size well and this variety is a very heavy yielder. The flavor and quality is better than Howard–17, probably not as good as Sparkle and Catskill. Growers with road-side stands and the lighter soils favor the Robinson for the heavy yields possible under good management.

Under drawbacks, the Robinson makes too many runners; some years leaf spot becomes serious; the berry although attractive in

appearance is quite soft and does not ship well.

#### \*MIDLAND

The Midland is outstanding as an early berry and is one of the best early berries we ever had. The superb shape, red flesh, tart flavor, good yield and good shipping qualities make this a wonderful berry. Although it is not a heavy runner maker, the virus-free stock makes a good runner growth and has shown good vigor.

#### \*HOWARD-17 (Premier)

Howard-17 is one of the oldest self-pollenizing strawberries. For the New England states and other northern areas, it is probably the earliest, nearly frost-proof berry. Its picking season starts a week to ten days earlier than most varieties. It is a heavy producer on a wide range of soils. In some seasons and some locations berries are small.

#### \*FAIRFAX

Fairfax was introduced by the U.S.D.A. in the early thirties and still leads the field for its unusually fine-flavored, sweet, firm, good quality berries, and is especially liked by home gardeners. The berry is a very dark red and a comparatively low yielder, which accounts for its not being a commercial berry. The size and yield of our stock was good, which checks with some growers who retail and who get a premium for this excellent berry.

#### \*EMPIRE—Origin New York Station

The Empire is a cross between the Dresdan and Sparkle and is a very productive variety with very large conic to wedge-conic shaped

berries of attractive light red color. The berries are firm, ship well, and the market appearance is excellent. The quality is better than Howard-17, but probably not as good as Catskill or Sparkle. Under good management berries hold their size well and they ripen five to seven days later than Howard-17. With us Empire has been an erratic producer.

#### \*ARMORE

One of the newer strawberries developed by the Missouri Station. Armore is midseason to late and a very heavy yielder of large blocky berries that stand up well. Its fine flavor and large size make it very popular with "pick your own customers." In comparison with Sparkle, Catskill, and Robinson it lacks good market appearance. Some seasons and in some locations the foliage seems to be susceptible to leaf spot and mildew. The use of fungicides can correct this.

#### \*ORLAND (Maine No. 127)

Orland is a heavy yielder of fancy berries that are an attractive red, about the same quality and firmness as Howard-17, but holds size better. The plant is vigorous, has good fruit stems, produces many short, stocky runners, and is resistant to red stele disease. Parentage: Aberdeen x Howard-17.

#### \*POCAHONTAS

A new outstanding U.S.D.A. introduction which originated from a cross of Midland and Tennessee Shipper. This variety is already recognized as a very heavy yielder. Berries are good size, firm, bright and attractive; they should be a good shipper. The flavor is a little on the tart side. Work at the Virginia Experiment Station indicates that Pocahontas in that area, set under the hill system in the fall, will produce a good crop of berries the following spring.

#### \*EARLIDAWN

A new variety just released by the U.S.D.A. which is a cross of Midland and Tennessee Shipper. Tested for several years it has behaved well and yielded a good crop of very early berries. On an early location it will be from four to six days earlier than Howard–17 and produces a big percentage of its crop the first seven or eight days. In 1955 at Beltsville, Md., a yield was noted of 9640 quarts per acre. The fruit is quite firm with a tough skin. Color is a vivid light red which persists well as a light red on holding. The berries are fairly uniform in shape with a tart good flavor and in freezing tests have rated high for color texture and flavor. Earlidawn makes a large plant but is not a heavy runner producer. A must for trial for an early berry.

#### \*SURE CROP

Another new introduction by the U.S.D.A. A cross between Fairland and Maryland U. S. 1972. Sure Crop is a mid-season berry averaging large size berries and maintaining size throughout the sea-

son. Berries are a light bright red color, but do not darken too much. The fruit is firm with tough glossy skin, irregular wedge-shaped first berries, later uniform short conic berries of good size with tart good flavor, rated as satisfactory for freezing. Sure Crop is rated as a very vigorous grower, even more so than Pocahontas and like Stelemaster is resistant to three strains of red stele. Sure Crop has been tested in New York State and indications are that it has good frost resistance; hence, its name Sure Crop, which entitles it to a good trial by any grower in the Northeast.

#### \*REDGLOW

This American Beauty is a cross of Fairland and Tennessee Shipper tested for several years by the U.S.D.A. and just released. Redglow ripens second early, berries are large and maintain size well throughout season. The berries are a vivid deep red, as firm as Sparkle, uniform in shape, sub acid, good flavor, good freezers, wedge shaped to short blunt and conic, and as attractive as Empire. Redglow has proved moderately productive, produces runners freely and is resistant to common forms of red stele. Redglow has not been tested in the Northeast, but is worthy of a trial, particularly for roadside operators, for freezing, or for anyone who wishes an unusually attractive berry. In 1958 it was early with us—a day or two after Midland and Earlidawn.

#### \*VERMILION

Vermilion is a new berry from Urbana, Illinois, developed as a red stele resistant variety for heavier soil types. The berries are a deep red, conical shaped with a red center and of very good flavor. More prolific than Fairfax and as good quality. In 1958 it was second early with us and the fruit set so heavy that size did not hold up well.

#### \*RED STAR

The Red Star is a late fruiting, high quality fine flavored strawberry with prominent seeds and a good crop of fruit. One of its drawbacks is that it never made enough runners. The virus-free plants that we have now have made a remarkable growth and ample runners to set a good fruiting row. Even though it may be a shy runner maker, it is still one of the finest late strawberries available.

#### JERSEYBELLE (New Jersey 7A)

We saw the berries from this variety sold on the auction block in New Jersey for the highest price of all varieties including Sparkle, due in part to their enormous size and marvelous appearance, and they are even larger than Robinson. We recommend them for trial to all commercial growers who have good soil and a good fresh market. After picking them in a small way for two years, we do not think they are high enough in quality for home gardeners. Jerseybelle so far is rated a fair runner maker and a good to heavy yielder.

#### GREAT BAY—Origin, New Hampshire Experiment Station

Great Bay is a cross between the New York Catskill and the Canadian Simcoe and is a very heavy bearer of June berries. The plants are large and the berries are blocky and have fair color and flavor. We have a very limited supply of new stock that we believe is substantially virus-free.

#### \*MERRIMACK F-13

The Merrimack berries are firm, bright red with a tough skin, some being wedge-shaped. The fruit is very large and fine flavored. This is a late variety and the first fruit is picked about two weeks after Howard-17. A moderate runner maker with large strong plants.

## **Everbearing Strawberry Plants**

#### \*GEM Everbearing (Per.)

Gem is probably the best standard old line everbearer on the market. Succeeds on a wide variety of soil. Berries are attractive bright red color. If you wish fall berries, plant the Gem. Remove first crop blossoms up until early July, then fall blossoms will appear in August and plants will fruit until freezing weather.

#### \*STREAMLINER Everbearing

A vigorous grower of somewhat smaller plants that yield well. Berries are rather tart and flavor seems to vary with the soil they are grown on. Yield very good with us in 1959.

#### **OZARK BEAUTY Everbearing**

The Ozark Beauty is a vigorous new variety producing quantities of large elongated berries, deep red with prominent seeds. Berries are very sweet and tasty. Plants are large and runner freely so that you must space the plants to get best results in fruiting.

## Asparagus Roots

We have a good supply of large, well-developed, one year roots from two of the newest selections of Mary Washington rust-resistant

asparagus adapted to the northeast.

These are both very productive strains from the best seed available in the country with the Viking and Waltham strains especially recommended for rust resistance, as well as their quality and productivity.

THESE ROOTS WILL ALL BE SPRING DUG, CARE-FULLY STORED, HANDLED AND GRADED FOR YOUR SATISFACTION.

Write to us for prices on large orders of these fine roots.

#### ASPARAGUS CULTURE

Set asparagus roots in trenches plow depth, or 6 to 8 inches below normal ground level, 18 inches apart in rows 3 to 4 feet or more apart. Lay roots out flat along bottom of trench and cover roots and crowns with one or two inches of soil. As stalks grow out of crowns and show strength, gradually fill in trench (which will help to take care of the weed problem the first year) without smothering the young crowns. By August the bed should be level.

Best time for setting roots is April 10th to May 10th.

Soil should be a medium-to-light, well drained, fertile soil, well

prepared, with witch grass eliminated.

Watch new growth for slugs and beetles. Dust or spray with D.D.T., Rotenone or Calcium Arsenate as pests appear, usually in very hot weather.

Wait two years at least before start of cutting and then cut for only half of cutting season first year. Normal season is May 1st

through July 1st.

Manure may be applied in late fall or early spring and harrowed in. Broadcast fertilizer each year after cutting season is over to grow vigorous ferns, which along with warm weather, regulate the size of crop the following year. If weather is very dry after cutting season or during midsummer growing season of new plantation, be sure and irrigate adequately 2 or 3 times.

After plantation is well established, weed control can be had by using new chemical C.M.U. Cyanimid properly timed is also an

effective control during and after cutting season.

#### VIKING WASHINGTON

Developed at the Vineland Station, Ontario, Canada. This is a good prolific strain, producing more large spears of uniform size than any of the older strains.

#### WALTHAM WASHINGTON

Newest of all Mary Washington selections, very productive with wonderful quality and good rust resistance. Large spears with buds remaining tight until spears of smooth, dark green color grow quite tall. Some purplish tinge characteristic of Washington asparagus is visible. This excellent strain is the result of twenty-five years of patient selection and testing at the Waltham Experiment Station, Waltham, Mass., by Professor Robert E. Young. We especially recommend this variety of asparagus.

Set STRAWBERRIES and ASPARAGUS for profit, health and satisfaction. We can think of no better way to utilize spare time and spare land than to grow strawberries and asparagus. You can eat them, freeze them, preserve them, find a ready local market for them. Write us for special prices on plants for 4H boys and girls and other information you may wish.

## PRICE LIST FOR SPRING AND FALL 1960

STRAWBERRY PLANTS	1-20	25	50	100	200	300	400	500	1000
Early Varieties							100	300	1000
*Earlidawn	10c each	1.75	2.75	4.50	8.00	10.50	13.00	15 00	0W 00
*Fairfax	8c each	1.50	2.50	3.85	7.00	9.30		15.00	27.00
*Howard 17	8c each	1.50	2.50	3.85	7.00		12.00	13.50	25.00
*Midland	10c each	1.75	2.75	4.50	8.00	9.30	12.00	13.50	25.00
Midseason Varieties		1.70	~	<b>T.</b> 50	0.00	10.50	13.00	15.00	27.00
*Armore	8c each	1.50	2.50	3.85	7.00	9.30	10.00	10 50	
*Catskill	8c each	1.50	2.50	3.85	7.00		12.00	13.50	25.00
*Empire	8c each	1.50	2.50	3.85	7.00	9.30	12.00	13.50	25.00
Great Bay	10c each	1.75	$\frac{2.75}{2.75}$	4.50		9.30	12.00	13.50	25.00
*Orland	8c each	1.50	2.50		8.00	10.50	13.00	15.00	27.00
*Pocahontas	8c each	1.50	2.50	3.85	7.00	9.30	12.00	13.50	25.00
*Red Glow	8c each	1.50		3.85	7.00	9.30	12.00	13.50	25.00
*Robinson	8c each		2.50	3.85	7.00	9.30	12.00	13.50	25.00
*Surecrop	8c each	1.50	2.50	3.85	7.00	9.30	12.00	13.50	25.00
*Vermilion		1.50	2.50	3.85	7.00	9.30	12.00	13.50	25.00
	8c each	1.50	2.50	3.85	7.00	9.30	12.00	13.50	25.00
Late Varieties									70,00
Jersey Belle	10c each	1.75	2.75	4.50	8.00	10.50	13.00	15.00	27.00
Merrimack	10c each	1.75	2.75	4.50	8.00	10.50	13.00	15.00	27.00
*Red Star	8c each	1.50	2.50	3.85	7.00	9.30	12.00	13.50	
*Sparkle	8c each	1.50	2.50	3.85	7.00	9.30	12.00		25.00
Everbearers					•	0.00	12.00	13.50	25.00
*Gem	10c each	2.00	3.00	5.00	9.25	10 00	1 5 50	W 100	
Ozark Beauty	10c each	2.00	3.00	5.00		13.00	15.50	17.50	
*Streamliner	10c each	2.00	3.00	5.00	9.25	13.00	15.50	17.50	
	100 cach	~.00	3.00	3.00	8.50	12.00	14.00	16.00	27.00
ASPARAGUS ROOTS									
Waltham Washington	10c each	2.00	3.50	5.50	**9.00	12.00		15 00	22 22
Viking Washington	10c each	2.00	3.50	5.50	**9.00	12.00		15.00	26.00
*Indicates varieties fro	m virus-free stock			200 or more	energone Post	ts shipped F.O.	р т	15.00	26.00

Prices quoted on request for larger orders of Strawberry Plants and Asparagus Roots.

#### SHIPMENT AND PRICE INFORMATION

Price list is shipment prepaid on all parcel post orders up to and including the Fourth Zone.

Add 10% for parcel post beyond Fourth Zone (600 miles and over).

Deduct 5% for all Express orders. Orders over Fourth Zone sent express, F.O.B., Lawrence, Mass., which is the best method for larger orders.

Please figure varieties separately as listed on price list.

For quantities not listed up to 1000 plants figure price on basis of next lowest quantity. For example, 350 plants would take the 300 quantity rate.

#### FALL SHIPMENT OF STRAWBERRY PLANTS

Add 20% on fall shipment of strawberry plants, which is from September 1 to October 15. Do not group varieties together at price of one variety. Figure separately as listed in price list. Request special prices and shipping arrangements for larger orders than listed. No orders shipped C.O.D.

ROGER H. LEWIS, 28 Laurel Lane, Andover, Massachusetts • Telephone MUrdock 2-0318



## Cultural Suggestions and Observations on Strawberries

#### SOILS

Strawberries succeed on a variety of soils, with the best success had by avoiding the extremes of too dry and sandy soil or too heavy and wet soil. We have soils in New England capable of outstanding yields. Charlton, Paxton, Woodbridge, Coloma, Gloucester fine sandy loams, Merrimac fine sandy loams and others are desirable.

#### SOIL PREPARATION

Soil preparation should be as thorough as for vegetables, with care taken to avoid too much travel with a tractor over the ground after the final plowing. Fall plowing followed by spring plowing is good with a thorough harrowing job just before the final plowing. Spring plowing should be followed by a careful leveling operation, thus aiding greatly in proper plant setting.

#### SOIL FERTILITY

Other things being equal and well done, yields of strawberries are dependent on the amount of organic material available in the soil for decaying during the growing and fruiting period. Organic or humus content depends upon the amount of cover crops, manure or other material plowed under or worked into the soil prior to setting the plants. Cow manure is ideal, either applied the same year or the year previous to setting plants. The use of too much poultry manure just previous to setting strawberries produces too rank a foliage and tends to soften berries. Poultry manure applied to a sod or cover crop just prior to plowing is good practice. Feeding the growing cover crop with manure or fertilizer is sound practice, unless the land is very fertile. Applying super-phosphate or balanced fertilizer with manure as cover crop is worked in is desirable.

Once plants are set and well established, a light side dressing of

balanced fertilizer is beneficial.

#### SOIL MANAGEMENT

Strawberries like new land or land that has been in sod a year or two previous to setting strawberries. However, many good crops of strawberries are grown every year on old ground which has been under cultivation for many years. It is a good plan to rotate your plantings of strawberries, especially if the location is poorly drained. We also advise to avoid setting strawberries on land where potatoes, raspberries, tomatoes or peppers have been planted the previous year. Land that is fallowed or planted to beans, squash or cover crops the previous year is good management. Work in your cover crop as much in advance as possible before setting strawberries, especially if you

have a rank cover crop. Where the cover crop is not too heavy, it can be worked in just before you set the plants if you apply a moderate amount of poultry manure or fertilizer, or a combination of the two, thoroughly disked down with the cover crop before plowing.

Recent experiments have definitely shown that applying organic materials such as peat, sawdust and cover crops, along with manure and fertilizer, gives the best yields. Manure and fertilizer rate second in results and fertilizer alone gives the lowest yield and poorest runner

production.

Much labor in caring for the bed can be saved by controlling weeds and eradicating witch grass for a year or two previous to setting the strawberry plants. Good and thorough preparation of the soil is important in either mechanical or chemical weed control. Progress has been made in the use of chemical weed control with Crag Herbicide Sesan and other materials.

Our experience and observation indicates that success with chemical weed control depends on several factors and anyone using chemicals should get in touch with their local Extension Service for the latest recommendations. For instance, soil moisture or lumpy condition of soil will affect the results of the Crag Herbicide. Where chickweed is a problem, as it is with many growers, a late fall or (and) a very early spring application of Chloro I.P.C. during the dormant period will do an excellent job of control. Here again contact your Extension Service for details.

Regarding Lime. It is commonly believed that no lime is ever needed on land used for strawberry growing. We believe that all crops on New England's acid soils benefit from use of some lime. One of the finest and largest crops of strawberries (Catskill) we ever grew was on a half acre of land that had not been limed for many years until we limed it the year previous to setting the plants. The P.H. for strawberries should probably not be allowed to get higher than 5.5 or 6.0. We feel a very low P.H. reading calls for some lime and the strawberry crop will benefit.

It is good sound practice on any land, particularly new ground, to apply 25 lbs. of Chlordane to the acre, either dusted on and harrowed in, or used in a fertilizer mixture. This practice is not expensive and will eliminate grubs, wire worms, and reduce cut worm injury,

which will in many cases pay for itself several times over.

#### MANAGEMENT OF GROWING PLANTS

It is extremely important to set plants as early as ground can be properly prepared in the spring. The availability of irriga-

tion may offset the disadvantage of late planting somewhat.

Plants may be set 18 inches apart, in rows 4 feet apart. Strawberries are grown successfully with many variations of this spacing. Any system should (1) be uniform throughout field for ease of cultivation, (2) prevent the rows from meeting in the middle, which makes picking difficult, and (3) prevent the runner plants from setting too thickly, thus robbing each other of plant food, moisture and air, which results in smaller berries and lower yield.

One of our customers solved the problem of control of late runners on some of the newer varieties by running two rolling disc colters down the edges of the rows and following with a rototiller late in the fall, thus disposing of the surplus fall runners and providing adequate

space for aeration and convenience in picking.

Always set plants with roots straight down. Be sure planter shoes or hand tool penetrates deep enough to facilitate proper planting. Care should be taken that plants are set with crowns level with top of the ground and not too deep, or worse still, too shallow. Also, through the growing season avoid covering either old or new crowns with a clod of dirt while hoeing, weeding or cultivating. Failure to observe these simple precautions probably accounts for 90 percent of the strawberry plant failures. (See cut on page 15).

To get the healthiest, most vigorous and prolific bed, the blossoms the first year should be pinched off by hand as they appear in the

spring.

Weed control is extremely important. "A stitch in time saves nine" cannot be overemphasized. We saw beds in past seasons that were allowed to become weedy into the drought season when it became impossible to remove weeds without causing the loss of practically the entire bed.

Mulching is not absolutely necessary, but very desirable. We have noted severe winter killing about once every four or five years where the grower never mulches. A mulch prevents freezing and thawing at intervals in late fall, winter and early spring. It keeps the fruit clean in wet weather, provides a degree of comfort for pickers and conserves moisture. It also checks weeds and, if plowed under with the old beds, adds to the humus content of the soil. Holding the mulch on as long as possible in the spring will tend to delay blossoming and sometimes enables the grower to escape a frost damage or partial frost damage to blossoms. With some materials it is not necessary to remove mulch from over plant row. Other materials require the removal of considerable amount. Any loose, weed free material is practical, such as meadow hay, salt hay, pine needles, oat or rye straw that has been thrashed, wood shavings or horse manure with a mixture of straw and shavings. Avoid materials which have a tendency to matt down tightly and smother the plants, such as decayed manure or wet leaves. A good rule is to apply mulch just thick enough to cover plants so that only occasionally do you see a few leaves. Some evidence now indicates that early mulching before any severe freezing gives the best results.

Irrigation, like mulching, is not absolutely necessary in growing good strawberries. However, several past seasons have demonstrated the value of a good portable system. Another point in its favor is the possible use of irrigation to ward off frost damage to blossoms prior to fruiting season. This practice, which amounts to crop insurance, is in general use by many growers. Irrigation should start before temperature gets to freezing and continue until temperature rises above freezing. On a frosty night irrigation will coat the entire planting with ice but experience has shown that fruit buds will not be damaged whereas

dry foliage and frost may kill some of the buds and reduce the crop. Recent research indicates that ample moisture supplied by irrigation, if necessary during the month of September, when most of the fruit buds are formed in the crowns, can increase the total quantity, as well as quality, of the crop the following spring.

## Disease and Pest Problems of Strawberries

In the order of their importance or common occurrence we list the following diseases and pest problems of strawberries: nematode injury and black root rot; strawberry virus; cyclamen mite infestation; red stele root disease; verticilium wilt and other miscellaneous

insects and diseases.

If you have a serious nematode or black root rot problem, you should consider fumigation of soil. We practice a four-year rotation and fumigate our nursery land prior to setting strawberries. This fumigation destroys grubs, wire worms, and nematodes that injure the strawberry plant roots permitting the fungi to enter the roots which in turn creates black root rot. You can control black root rot too by rotating land. Avoid planting potatoes, peppers, and tomatoes ahead of strawberries in your rotation.

We originate our plant stock from a screenhouse that protects plants from the strawberry aphids which cause the virus by coming in from other areas after feeding on infected plants. We also dust and spray throughout the growing season both inside and outside of the screenhouse to eliminate the aphids, thus eliminating the virus. For your berry production it is not necessary or practical to control the aphids, but it is important to start with substantially virus-free plants.

Cyclamen mite in recent years has become a problem with some growers in some areas. Cyclamen mite can be transferred on nursery stock as it can escape from nearby greenhouses from other plants, such as ornamentals; even weeds are hosts for cyclamen mite. This mite causes dwarfing of the plants and discourages runner emergence. If you think you have cyclamen mite you can control it by drench spraying either the whole area or trouble spots with Micible Endrin or one of the newer chemicals if recommended by your County Agent.

We have made a thorough investigation of practical methods for elimination of cyclamen mite in cooperation with a competent entomologist. We drench-sprayed five times with Thiodan, with the first and second sprays applied before runners started this past growing season and a check of our plantings this past fall by a competent entomologist failed to uncover any cyclamen mite. We believe our stock to be free of cyclamen mite.

Red Stele has become serious in some areas. It can be avoided by using clean plants on soil that has no history of red stele infection. Some authorities claim red stele can be ignored on infected soil by using resistant varieties. Stelemaster and the new variety of Sure Crop have resistance to three strains of red stele. Sparkle, Red Glow, and Vermilion have resistance to the most common forms of red stele. Note that red stele almost always occurs on poorly drained locations.

Verticilium wilt is a soil borne plant disease which has only recently appeared in strawberry plantings in a few places in New England. A typical experience is that after new runners have been established the mother plant succumbs to wilt. Do not plant strawberries where infected plants, indicating soil infection, of any species have been growing. With other crops, sweet corn for an example, the solution has been to plant wilt resistant strains or varieties in badly infected areas.

Leaf spot and leaf scorch, especially with some varieties, has been a problem. It is now standard practice with many growers to apply spray or dust of Captan which practically eliminates leaf spot, leaf scorch and resulting fruit rot. Fruit from Captan treated beds stands

up longer in shipping.

If spittle bugs or tarnish plant bugs which cause misshapen and nubbin berries are a problem, spray with 50% D.D.T. as late as possible in the spring before the bloom starts.

#### FALL SETTING OF STRAWBERRY PLANTS

Each year we are selling more plants in the fall and are frequently asked about this practice. A fall set bed does away with the necessity of setting in the spring. If fall set plants are set in several rows a foot apart each way, they can be fruited the following June to some advantage. Fall setting will sometimes allow establishment of a bed on heavy or wet soil that usually cannot be worked early in the spring,

especially a wet spring.

There are some disadvantages to setting plants in the fall. These plants must be mulched individually the first winter with sawdust or shavings because plants set in freshly worked soil are more likely to heave or wash out in heavy rains. You must make sure the mulch stays on all winter. Do not remove the mulch too early in the spring. If the land is weedy and the following spring is wet, weed control is sometimes difficult. Fall set plants cost a little more. Although fall set plants throw runners sooner, spring set plants of vigorous stocks will supply ample runners. The majority of growers still seem to prefer spring setting.

## Purchase Information

Orders reserved for future delivery on receipt of one-fourth purchase price, the balance to be received on notice of shipping date. After APRIL FIRST send check, money order or cash for immediate delivery. NO ORDERS SHIPPED C.O.D. When you take delivery at farm, a cost of shipping discount is allowed.

Parcel post is usually the fastest and most satisfactory for small shipments through the fourth zone. ADD 10% FOR PARCEL

POST BEYOND THE FOURTH ZONE. Deduct 5% for all express orders to be sent F.O.B., Lawrence, Mass. All prices quoted shipment prepaid except on orders of 200 or more asparagus roots which are shipped F.O.B., Lawrence, Mass.

Do not group varieties together at price of one variety, but figure separately as listed in price list.

Request special prices and shipping arrangements for larger orders than listed.

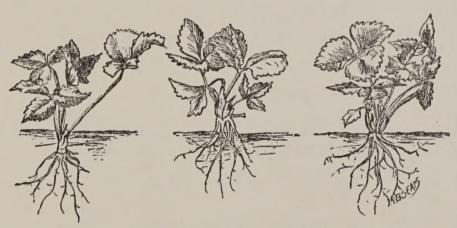
All strawberry plants are freshly dug just prior to time of shipping and packed to arrive in best possible condition. All asparagus roots are dug at the earliest possible date in March or early April, then stored and shipped to arrive in good firm condition.

Spring shipping dates: April 1 to May 30. Fall shipping dates: September 1 to October 15. Add 20% to list for fall plants.

We take all precautions to have our stock true to name and to arrive in good condition. If you have any claim, please notify us within ten days and if stock is available, we will replace same or refund your money. We cannot give any further guarantee beyond the purchase price due to the many factors beyond our control after the plants are shipped.

All plants shipped after May 25 will be packed and shipped in best possible condition but at purchaser's risk.

For SPECIAL HANDLING include 25c up to 2 lbs.; 35c from 2 lbs. to 10 lbs.; 50c from 10 lbs. and up.



Strawberry plants set at various depths; left-hand plant set too deep; middle one too shallow; right hand just right.

### How to Get to the Lewis Farm

#### From Lawrence and Andover:

Turn west from Route 28 in South Lawrence at Andover Street. Go three (3) miles, Overpass new highway and take first right at sign.

#### From Lowell:

Turn left off Andover Street, Route 133, at Tewksbury-Lowell line, onto River Road. Drive four (4) miles to our sign at Laurel Lane.

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#### CERTIFICATE OF NURSERY INSPECTION

# The Commonwealth of Massachusetts DEPARTMENT OF AGRICULTURE Division of Plant Pest Control and Fairs

OFFICIAL CERTIFICATE No. 62

Boston, July 15, 1959

#### To Whom it may concern

This is to certify that in accordance with Sec. 17, Chap. 128, G. L. Mass. Tercentenary edition, as amended, the strawberry nursery stock of LEWIS FARM grown at Andover, Massachusetts, has been inspected and found to be apparently free from all injurious insects and plant diseases which might be disseminated on such stock.

This certificate good until July 1, 1960.

Inspected by P. C. Kuzmiski (Signed) Q. S. Lowry
Assistant Director of Plant Pest Control